EECS C145B / BioE C165: Instructional computing accounts and Matlab

1 EECS Instructional accounts

All students enrolled in an EECS class are entitled to an instructional account. Many of you, who already possess such an account, may disregard this section.

If you are not officially registered for the course (on TeleBears), you will need to get a form signed by the instructor or the TA before you can proceed so that an account can be created for you.

If you are registered but do not have an instructional account (i.e., non-EECS majors) should follow the following instructions:

1. Locate any of the following instructional computer labs that have Unix workstations:
   - 199 Cory Hall
   - 271, 273, 275, 277 or 283F Soda Hall

   Details on instructional computing labs are at:

   `http://www-inst.eecs.berkeley.edu/~iesg/iesglabs.html`

   Also check out:

   `http://www-inst.eecs.berkeley.edu/~inst/newusers.html`

   for other information for new users, including how to get after hours cardkey access to the labs.
2. Log in as *newacct*.
3. Enter all required information.
4. Go to 391 Cory the next afternoon to obtain your temporary password.
5. Return to a lab of your choice and change this password by invoking the Unix utility *passwd* .
6. Should any problems arise, return to 391 Cory, and they will tell you what to do.

2 The UNIX environment

Students who need to familiarize themselves with UNIX can read the *EECS Instructional User's Guide to* UNIX™, which is available in each of the instructional labs, or may be purchased from Copy Central on Euclid Avenue for around $13.

Make sure that you can use the following commands and utilities:

cd Change directory.

cp Copy file(s).

enscript Print text file on PostScript printer.

lp or lpr Send file(s) to printer.

lpq or lpstat Check printer status.

lprm Remove print job (on many machines).

ls Directory listing

man Display manual entry for command. For example, to find out how to use *enscript*, type *man enscript*.

mv Move file(s)

passwd Change your password.

pwd Current directory

rm Remove file(s)

CTRL-C Send break

CTRL-Z Suspend current job and give shell prompt

bg Run job in background

fg Run job in foreground

Always *logout* or *exit* at the conclusion of a session.

Since it will be necessary to edit your code files, it is a good idea to play around with text editor. Emacs is a good editor to use. Invoke Emacs by typing

```
emacs&
```

at the command prompt. The ampersand tells the shell to run the job in the background, leaving you with a command prompt.

If you want to run an application such as Matlab remotely, perform the following steps:

1. Find the name of an instructional machine which can run the application you wish to use. These are printed on labels affixed to each workstation. You can also type *clients* at the command prompt. This gives a list of all computers which are available for your use.
2. Log in to your local machine.
3. Type

   ```
   xhost +machine_name
   ```

   substituting "machine_name" with the name of the other machine.
4. Type

   ```
   ssh machine_name
   ```

   and enter your password.
5. You are now logged on to the other machine. You now need to tell that machine to send graphic output to your current workstation. Type

   ```
   setenv DISPLAY my_machine_name:0
   ```

   where you substitute 'my_machine_name' for the name of the machine you are currently sitting in front of. On some machines, steps (3) and (5) are not necessary.

3 Invoking Matlab

At the command prompt, type *matlab* . You are now in the Matlab command line environment, and may call any Matlab functions, or assign or view and of the variables present in the current workspace.

When you are done, type *quit*.